Southwest Region - Safety Newsletter

February 2004

NAVOSH

Lifting Techniques for Back Injury Prevention

Lifting doesn't have to be a dangerous proposition, even when it's done regularly at work or at home. As long as you know the facts about correct lifting and bending techniques, you can protect your back from unnecessary added stress and possible injury.

Everyone puts a lot of stress on their backs every day from the process of bending and lifting, even those people who don't have a job that requires frequent heavy lifting. Think of how many times a day you bend down to pick something up: laundry, your pet, a piece of paper, etc. Continued bad form when lifting, even something small, can cause unneeded stress on your back and make it more prone to injury.

There are two common mistakes made in lifting. The first is using the wrong muscles, the back muscles, instead of the leg and buttock muscles. You should always bend your knees when lifting heavy objects so you have a solid foundation for your spine. You should keep your trunk vertical when bending down and lifting something. A horizontal trunk can put pressure on the lower back amounting to hundreds of extra pounds. This pressure can eventually compromise a disc or sprain or strain a back muscle.

The second common error is lifting an object too far from the body. Get close to what you are lifting. It decreases the pressure on your spine. Try to start with the center of the weight no more than 8 inches from your body, then lift the object with a straight back using your leg and buttock muscles. These are simple principles that will help you minimize injury to your back when lifting.

Just to illustrate, if you lift a 10-pound weight at arms length, it will put 150 pounds of pressure on your back. Lifting an object that weighs 86 pounds puts over 700 pounds of force on the discs in the lower back. An object that weighs over 86 pounds should not be lifted more than a distance of 12 to 13 inches and should not be lifted more than once every five minutes if possible. The heavier the object, the shorter distance it should be lifted. If the object must be lifted higher, assistance or a machine should be utilized. In the case of mandatory occupational lifting, positions or loading platforms should be adjustable to the height of different people. Try not to reach when lifting items higher than chest level. Lifting objects higher than chest level puts considerably more stress on your lower back. When lifting items above your head, make sure to use a stool or a ladder.

Another important guideline to follow is to limit twisting when lifting. This adds more force to your back. If you must turn when lifting, pivot your feet instead of twisting your back. In addition, always be sure of your footing. A sudden change in footing or a trip can cause enormous amounts of added stress on the back.

Another problem with lifting is fatigue. The more you bend and lift, the more fatigued your muscles become. When muscles are fatigued they are more prone to injury. Frequent breaks when lifting are preferable to help rejuvenate strength.

Always use both hands when lifting and lift slowly and deliberately. The ideal situation is to have someone or something to help you when lifting, but if that's not possible, follow all the above listed guidelines to minimize your risk of injury.

The following is a review list of dos and don'ts when bending and lifting:

Don’ts

- Don't lift things when your feet are too close together. If your feet are closer than shoulder width you'll have poor leverage, you'll be unstable, and you'll have a tendency to round your back.
- Don't lift with your knees and hips straight and your lower back rounded. This is the most common and stressful bad lifting move. Twisting the trunk during this bad move compounds the problem.
- Don't tense and arch the neck when lifting. This crams your neck joints together and causes pain especially if maintained for a long period of time.
- Don't lift and/or carry an unbalanced load.
- Don't lift and bend too much in a short period of time.
- Don't lift objects that are too heavy for you.
- Don't lift heavy objects directly following a sustained period of sitting, especially if you have been slouching.
- Don't lift things overhead with your neck and back arched, if possible.

Dos

- Do place your feet and knees at least shoulder width apart or front to back in a wide-step position. This will help you bend at the hips, keeping your back relatively straight and stress free.
- Do lean over or squat with the chest and buttocks sticking out. If you do this correctly, your back will be flat and your neck will balance in a relaxed neutral position.
- Do take weight off one or both arms if possible. When you squat down or push back up, use your hand or elbow as support on your thigh or any available structure. This takes some of the compression and strain off of the lower back.
- Do balance your load on either side if possible, or switch sides so that both sides are equally stressed.

- Do level the pelvis or tuck in your buttocks and suck in your abdomen, when reaching or lifting overhead. Keep your chest up and use a step stool to keep the low back and neck in neutral alignment.

- Do walk around and use backward-bending and/or stomach-lying positions before or after bending or heavy lifting, especially if you've been sitting for a while.

"Choosing and Using Hearing Protection"

Silence may be golden – but not when it is permanent. Hearing loss is a condition that can occur over a period of time from repeated exposure to excessive noise. Some hearing loss as a result of aging is normal, however noise can accelerate the onset of loss. We can't always prevent noise, but we can prevent hearing loss by following and using appropriate hearing protectors for the noise hazards we face each day.

Hearing loss has been, and continues to be a source of concern within the Navy. The Navy has established a Hearing Conservation Program to prevent occupational noise-related hearing loss and ensure auditory fitness for duty in the military and civilian workforce. The Hearing Conservation Program includes:

- Noise measurements and analysis to determine areas of hazardous noise level.
- Implementation of Engineering Controls to reduce noise at the source.
- Audiometry to conduct periodic hearing tests to for early detection of hearing loss experienced by personnel and implementation of controls.
- Education - Training for personnel on the Hearing Conservation Program, hearing loss prevention techniques, and labeling of noise hazard areas to notify of noise hazards.
- And finally: Hearing Protective Devices – issuing and training on use of ear plugs, ear muffs, etc.

Noise is measured in units called decibels (dBs or dBAs). The use of Hearing Protective Devices is responsibility of all personnel who enter or work in areas that generate noise levels greater then 84 dB(A), or 140dB-peak sound pressure level or greater. Your local servicing Industrial Hygiene Department can help you determine if your work area produces noise levels at or above this level. Areas where noise levels have been measured above this threshold have appropriate signage or labeling to alert personnel to wear Hearing Protective Devices.

Hearing Protective Devices come in a variety of types and styles. Ear plugs can be formable, custom molded, pre-molded, disposable, re-usable and may be made of many different types of materials such as acoustical fiber, silicone, rubber or plastic. Ear muffs also come in a variety of styles. Muffs cover the entire ear and can reduce noise levels by as much as 15 – 30 decibels. A combination of insert type ear plugs and ear muffs shall be worn in all areas where noise levels exceed 104 dB(A).

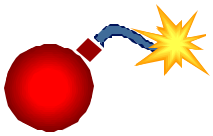
Hearing Protectors can only work if you wear them correctly and consistently. Depending on the type of hearing protection you use, inspect, clean, and/or dispose of them and replace as necessary. For reusable protectors, follow the manufacturer's guidelines for cleaning and storage.

On or off the job, you can protect your hearing by wearing the appropriate Hearing Protective Devices. Remember that excessively loud music, home appliances and tools, lawn mowers, etc., can create excessive noise, so protect your hearing wherever you are.

Traffic Safety Reminder - Crosswalks

If you have a 3500 pound car verses a 175 pound person, who wins? Many personnel aboard our bases choose walking over getting in a vehicle to get to meetings, pick-up some lunch, or simply for exercise. Most utilize crosswalks, some don't. Many of our personnel are being seriously injured just crossing the street, even in daylight. A recent survey at one of our U.S. Naval Installations has shown that although all crosswalks are marked most are unlit during hours of darkness. Be ever watchful for pedestrians. It only takes a split-second to run over someone, days or even months to recuperate, and less than a minute to wait. Time is not that precious, life is.

EXPLOSIVE SAFETY CORNER



When it comes to Ammunition and Explosives (A & E) what information is needed to determine its compatibility, why is compatibility important and can an item be assigned to more than one compatibility group?

Answer: First, all A & E materials are grouped into one and only one compatibility group. There are thirteen groups that have been established (A, B, C, D, E, F, G, H, J, K, L, N & S).

Each item is assigned to a group depending on several factors which include, but are not limited to: chemical and physical properties; design characteristics; inner and outer packaging configuration; hazard classification; net explosive weight; rate of deterioration; sensitivity to initiation; and effects of deflagration, explosion, or detonation.

Like items are assigned to the same compatibility group so that they can be placed with other like items for storage and transportation. Items are grouped together that will not significantly increasing either the probability of an accident occurring or increase the magnitude of the effects of such an accident.

If you have additional questions about this subject or explosive safety in general, contact your site Explosive Safety Officer.

RECREATIONAL AND OFF-DUTY SAFETY

February 8-14 is National Child Passenger Safety Week

One Minute Safety Seat Checklist

Using a safety seat correctly makes a big difference. A child safety seat may not protect your child in a crash if it isn't used correctly and installed properly in your vehicle. Take a minute to ***CHECK to be sure...***

- All Children age 12 and under should ride properly restrained in the back seat!!!
- Never place a rear-facing child safety seat in the front seat where a front mounted passenger air bag is present.

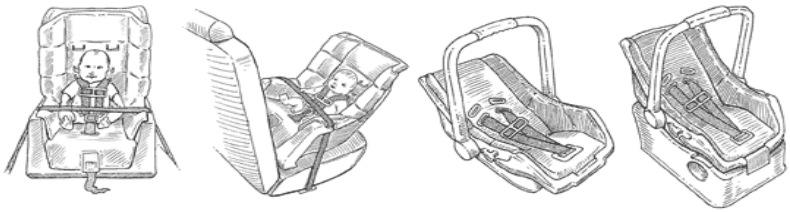
Do You Have and Understand the Instructions?

- Always read the child seat use and installation instruction manual.
- Read your vehicle owner's manual seat belt and child seat installation section.

Does Your Child Ride in the Correct Safety Seat?

Infants, from birth to age one, and at least 20 pounds, should ride in the back seat in a rear facing safety seat.

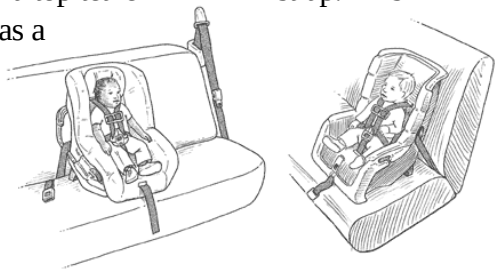
- Harness straps should be at or below the infant's shoulders.
- Harness straps should fit snugly. The straps should lie in a relatively straight line without sagging.
- The harness chest clip should be placed at the infant's armpit level. This keeps the harness straps positioned properly.
- Infants weighing 20 pounds or more before age one should ride rear facing in a convertible child safety seat rated for heavier infants (some convertible seats are rated up to 30-35 pounds rear facing).

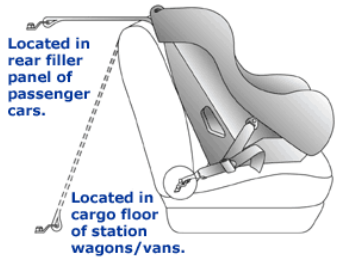


Children over one year and at least 20 pounds may ride in a forward facing child safety seat in the back seat. Children should ride in a safety seat with full harness until they weigh about 40 pounds.

- Harness straps should be at or above child's shoulders.
- Harness straps should be threaded through the top slots, in most cases.
- Harness should be snug. Straps should lie in a relatively straight line without sagging.
- Harness chest clip should be at the child's armpit level, which helps keep the harness straps positioned properly on the child's shoulders.

The **L**ower **A**nchors and **T**ethers for **Ch**ildren (**LATCH**) System is designed to make installation of child safety seats easier by requiring child safety seats to be installed without using the vehicle's seat belt system. As of September 1999, all new forward facing child safety seats (not including booster seats) have to meet stricter head protection requirements, which calls for a top tether strap. This adjustable strap is attached to the back of a child safety seat. It has a hook for securing the seat to a tether anchor found either on the rear shelf area of the vehicle or, in the case of mini-vans and station wagons, on the rear floor or the on the back of the rear seat of the vehicle. As of September, 2000, all new cars, minivans, and light trucks will have this tether anchor.





By September 1, 2002, two rear seating positions of all cars, minivans and light trucks will come equipped with lower child safety seat anchorage points located between a vehicle's seat cushion and seat back. Also by September 1, 2002, all child safety seats will have two attachments which will connect to the vehicle's lower anchorage attachment points.

Together, the lower anchors and upper tethers make up the **LATCH** system.

All children who have outgrown child safety seats should be properly restrained in booster seats until they are at least 8 years old, unless they are at least 4'9" tall.

- Belt-positioning boosters can only be used with both the lap and shoulder belt across the child. The shoulder belt should be snug against the child's chest, resting across the collar bone. The lap belt should lay low across the child's upper thigh area.
- Boosters should be used as "in between" safety devices for children over 40 pounds who have outgrown a forward-facing child seat.
- Booster seats should be used until the child can sit with his/her back against the vehicle seat back cushion, knees bent over the seat cushion edge, and feet on the floor, approximately 4'9".

Belt positioning booster must be used with a lap and shoulder belt

High-back booster with 5 point harness (used up to 40 pounds) (harness removed after 40 pounds)

High-back, belt-positioning booster provides head restraint in vehicle back seats with low backs or no head restraint. Must be used with a lap and shoulder belt.

If only a lap belt is available in the rear seating positions, an option may be to contact the vehicle dealer to see if retrofit shoulder belts can be installed. Another option may be to install products which can be used with a lap belt only such as a specially-made harness or vest. Contact the Auto Safety Hotline at (888) 327-4236 for additional information.

Control Flu Bugs This Season

Colds, "the grippe," pneumonia, and the flu ... nasty "bugs" that circulate relentlessly during the "flu season." While they can make you feel miserable and require bed rest, they can sometimes be life threatening. Recently, a report estimated that an average of 20,000 people die each year from the flu or its complications in the United States. One of the more severe life and long-term health threats is pneumonia.

There is an easy way to help combat the flu and pneumonia: annual immunization. After receiving flu shots for several years, the body begins to develop immunity or partial immunity to many varieties of influenza. There is also an effective vaccine against most of the more common kinds of pneumonia.

Another way to help your body fight off sickness is proper nutrition, and for many people, taking supplemental vitamins/minerals. (NOTE: Individuals should check with their doctor before taking a battery of vitamins/minerals.)

Other ways to help fight off colds and the flu include getting regular exercise of sufficient intensity to warm you up or make you sweat — but NOT overdoing it. Also, using paper cups in your bathroom rather than a plastic glass that everyone shares also helps. Finally, don't forget the importance of frequent hand washing to prevent the spread of germs.

If you do lose the battle against a cold or flu, proper care is a must. For starters, drink lots of water to prevent dehydration. The fever of colds and the flu can add to dehydration. And, too little water tends to worsen the increase of mucous and may contribute to the development of secondary infections. Water may help your body flush out the invader and the debris from their battle with your immune system. If you find that you have been quite sick for 10 days or more; or develop yellow, brown, green, or bad-tasting/smelling mucous, **seek medical attention**.

Remember, you may not be able to avoid this "flu bug" season, but proper care and treatment will help you and your family to stay in control. So take extra care while out shopping, in crowds, in school or at work, etc., enjoying the season!

HAZARD ALERTS

1. CPSC, Lang Candles Announce Recall of Thematic Candles

Hazard: Resin in the candleholder can ignite, posing a serious burn and fire hazard to consumers.
Description: The recalled resin-encased candles came in 57 different models and themes, including a birdhouse design, watering can, flowerpot, and Halloween and Christmas designs. Generally, the candles measured between 1 ½ to 4 inches in height and 2 ½ to 3 inches in width.
The multi-colored candles also had various fragrances, such as vanilla, eucalyptus, lavender, and butter pecan. Most of the units were filled with wax or had a metal wax-filled cup that was inserted inside the unit. On the bottom of all of the candles is a label that reads, "LANG

CANDLES, LTD. 800.260.8297 www.lang.com MADE IN CHINA." Sold at: Small craft and candle stores sold the candles from September 2001 through May 2003 for between $9 and $13. The candles were sold individually and in prepacks of two or three units. Manufactured in: China.

To view this press release online, use the following link:
http://www.cpsc.gov/cpscpub/prerel/prhtml04/04061.html

2. CPSC, Graco Children's Products Announce Recall of Bumble Bee Toys with Blue Antennae

Hazard: The blue antennae on the Bumble Bee toy can break, posing a choking hazard to young children. Incidents/Injuries: Graco has received 26 reports of the antennae breaking off of the Bumble Bee toys, including five reports of children who started to choke on the broken antennae. One child's throat was scratched when the child's mother removed the broken antenna from the child's mouth.

To see a photo of the recalled product, use this link:
http://www.cpsc.gov/cpscpub/prerel/prhtml04/04064.html

3. CPSC, K'NEX Industries Announce Recall "Mud Boggers" and "Street Shredders" Pump Up Racers.

Hazard: The air motor in the toy cars can burst while being pumped up, causing parts of the motor or car to break off. Some of these parts can have sharp points and pose a risk of eye or laceration injuries.

To see a picture of the recalled item, visit the following link:
http://www.cpsc.gov/cpscpub/prerel/prhtml04/04065.html

**SUCCESS IS THE GOAL,
DOING IT SAFELY IS OUR ROLE.**